IN THE CLAIMS:

Please cancel Claims 5, 6, 15, 16 and 18 to 58 without prejudice or disclaimer of subject matter, and amend the claims as shown below. The claims, as currently pending in the application, read as follows.

1. (Currently Amended) An image processing apparatus for performing error diffusion processing on multivalued image data having plural density components and outputting the result of said error diffusion processing, comprising:

first determination means for, upon execution of said error diffusion processing on a first density component among said plural density components, determining a threshold value used in said error diffusion processing based on a density value of a second density component;

first error diffusion execution means for executing said error diffusion processing on said first density component based on the threshold value determined by said first determination means;

first output means for outputting the result of execution of said error diffusion processing by said first error diffusion execution means;

second determination means for, upon execution of said error diffusion processing on said second density component among said plural density components, determining a threshold value used in said error diffusion processing based on a density value of said first density component;

second error diffusion execution means for performing said error diffusion processing on said second density component based on the threshold value determined by said second determination means; and

second output means for outputting the result of execution of said error diffusion processing by said second error diffusion execution means;

third determination means for, upon execution of said error diffusion processing on a third density component among said plural density components, determining a threshold value used in said error diffusion processing based on the sum of the density values of said first and second density components;

third error diffusion execution means for executing said error diffusion processing on said third density component based on the threshold value determined by said third determination means; and

third output means for outputting the result of execution of said error diffusion processing by said third error diffusion execution means,

wherein, in a case where said error diffusion processing is performed on said first to third density components, said first determination means determines the threshold value used in said error diffusion processing on said first density component, based on the sum of the density value of said second density component and a density value of said third density component,

and said second determination means determines the threshold value used in said error diffusion processing on said second density component, based on the sum of the density value of said first density component and the density value of said third density component.

2. (Original) The apparatus according to claim 1, wherein said first and second determination means use a table showing a relation between density and threshold values, for determining the threshold values.

3. (Original) The apparatus according to claim 1, wherein said first and second determination means respectively determine plural threshold values.

4. (Original) The apparatus according to claim 3, wherein said first and second determination means respectively use plural tables for determining said plural threshold values.

5. and 6. (Cancelled)

7. (Original) The apparatus according to claim 1, wherein said plural density components are a yellow component, a magenta component, a cyan component and a black component,

and said first density component is the cyan component, said second density component is the magenta component, and said third density component is the black component.

8. (Currently Amended) The apparatus according to claim ~~5~~ 1, further comprising image formation means for inputting the results of execution of said error diffusion processing outputted from said first to third output means and performing image formation.

9. (Original) The apparatus according to claim 8, wherein said image formation means is an ink-jet printer.

10. (Original) The apparatus according to claim 9, wherein said ink-jet printer has an ink-jet printhead that discharges ink by utilizing thermal energy, and wherein said ink-jet printhead has electrothermal transducers for generating the thermal energy to be supplied to the ink.

11. (Currently Amended) An image processing method for performing error diffusion processing on multivalued image data having plural density components and outputting the result of said error diffusion processing, comprising:

a first determination step of, upon execution of said error diffusion processing on a first density component among said plural density components, determining a threshold value used in said error diffusion processing based on a density value of a second density component;

a first error diffusion execution step of executing said error diffusion processing on said first density component based on the threshold value determined at said first determination step;

a first output step of outputting the result of execution of said error diffusion processing at said first error diffusion execution step;

a second determination step of, upon execution of said error diffusion processing on said second density component among said plural density components, determining a threshold value used in said error diffusion processing based on a density value of said first density component;

a second error diffusion execution step of performing said error diffusion processing on said second density component based on the threshold value determined at said second determination step; and

a second output step of outputting the result of execution of said error diffusion processing at said second error diffusion execution step;

a third determination step of, upon execution of said error diffusion processing on a third density component among said plural density components, determining a threshold value used in said error diffusion processing based on the sum of the density values of said first and second density components;

a third error diffusion execution step of executing said error diffusion processing on said third density component based on the threshold value determined at said third determination step; and

a third output step of outputting the result of execution of said error diffusion processing at said third error diffusion execution step,

wherein, in a case where said error diffusion processing is performed on said first to third density components, at said first determination step, the threshold value used in said error diffusion processing on said first density component is determined, based on the sum of the density value of said second density component and a density value of said third density component,

and at said second determination step, the threshold value used in said error diffusion processing on said second density component is determined, based on the sum of the density value of said first density component and the density value of said third density component.

12. (Original) The method according to claim 11, wherein at said first and second determination steps, a table showing a relation between density and threshold values is used for determining the threshold values.

13. (Original) The method according to claim 11, wherein at said first and second determination steps plural threshold values are respectively determined.

14. (Original) The method according to claim 13, wherein at said first and second determination steps, plural tables are respectively used for determining said plural threshold values.

15. and 16. (Cancelled)

17. (Currently Amended) A computer readable memory for storing a program for executing the image processing method according to any one of claims 11 to [[16]] 14.

18. to 58. (Cancelled)